

**DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU
Metcalf Building, Helena, Montana 59620
(406) 444-3080**

ENVIRONMENTAL ASSESSMENT (EA)

Division/Bureau: Permitting & Compliance Division, MGWPCS Permits

Project or Application: St. Mary Wastewater Facility; MTX000171

Description of Project: The permit authorizes the discharge of treated domestic/residential-strength wastewater from an existing mechanical plant that uses an activated sludge system involving a continuous-flow, suspended-growth aerobic process with extended aeration units. The effluent will be discharged to four (4) slow infiltration/percolation-evaporation (IP) ponds (Outfalls 001 through 004). Ultraviolet (UV) disinfection is proposed and should be operational by May 1, 2008. The annual average design flow is 107,000 gallons per day (gpd). Flows are continuous seasonally from early June through late September. A standard 500-foot ground water mixing zone will be permitted with ground water monitoring for Outfalls 001 through 004, to ensure compliance with Montana water quality standards. The location of Outfalls 001 through 004 is 48° 44' 30.7" North Latitude and -113° 26' 0.6" West Longitude. Discharge is to ground water, which is classified "Class I" by the Montana Groundwater Quality Standards.

Benefits and Purpose of Proposal:

Adequate treatment of residential-strength wastewater before discharging to ground water.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:

None

Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:

See Statement of Basis

Affected Environment and Effects from the Proposed Project:

<u>Key to Rank</u>	
NA	<i>Not applicable</i>
N	<i>No effects</i>
B	<i>Potentially beneficial effects</i>
A	<i>Potentially adverse effects</i>
M	<i>Corrective action required</i>
P	<i>Additional permits will be required</i>

Rank	Consideration	Remarks
PHYSICAL AND BIOLOGICAL ENVIRONMENT		
N	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	Discharge will increase moisture in the unsaturated zone. There is no indication that the site of this existing wastewater system has/will become unstable with proper operation of the system.

N	2.	HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	
N	3.	AIR QUALITY (effects to or from project, dust, odors, emissions)	No significant impacts have been determined.
N	4.	GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	There will be no significant degradation outside of the mixing zone for outfalls 001 through 004 (see Statement of Basis for details and calculations).
N	5.	SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	Divide Creek is approximately 370 feet east (hydraulically upgradient) from the outfall area. St. Mary Lake is located approximately 2,670 feet hydraulically downgradient from Outfalls 001 through 004. The lake is classified as an "outstanding resource water". Impacts to surface waters were determined non-significant (see Statement of Basis for details and calculations).
N	6.	VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	
N	7.	UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	
N	8.	LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands], access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	This facility is located inside the boundaries of Glacier National Park (permittee), which is recreational. The town of St. Mary is approximately ¼ mile north-northeast of the wastewater treatment plant.
N	9.	HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	This site was constructed in June 1982. However, should cultural materials be inadvertently discovered the permittee should contact the State Historical Preservation office so the site may be investigated.
N	10.	AESTHETICS (visual quality, nuisances, odors, noise)	The wastewater treatment plant is located inside the park boundaries. This is an existing system. There will be no new construction at this facility. There will be no aesthetic issues created.
N	11.	DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) { See (4), (5), and (8). }	Potable water is supplied from an onsite domestic supply well located east (hydraulically upgradient) from the plant.

Rank	Consideration	Remarks
IMPACTS ON THE HUMAN POPULATION		
NA	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	The project is for an existing wastewater treatment that discharges treated effluent to existing IP ponds.
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	
NA	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	
N	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	
N	16. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	
NA	17. LOCAL AND STATE TAX BASE AND REVENUES	
NA	18. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	
N	19. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	
N	20. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	
NA	21. REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS (<i>Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]</i>)	

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:
Glacier National Park

Public Involvement:
Thirty-day public comment period

Individuals or groups contributing to this EA:
Lisa Tursek P.E., Deputy Chief, Facility Management for Glacier National Park

Summary of Issues:
See Statement of Basis

Summary of Potential Effects:
See Statement of Basis

Cumulative Effects:
None

Recommendation:
Issue Ground Water Discharge permit

Recommendation for Further Environmental Analysis:

☐ Prepare an EIS

☐ Prepare a more detailed EA

☒ No further analysis

EA prepared by: Pat Potts

Date: June 5, 2007

Bureau Check-off

AWMB _____
IEMB _____

CSB _____
WPB _____

EMB _____
Other _____

Approved by:

Bonnie Lovelace, Chief
Water Protection Bureau
Permitting & Compliance Division

(Print name and title)

(Signature)

(Date)